



MONTGOMERY COUNTY FIRE AND RESCUE SERVICE POLICY AND PROCEDURE

Subject SOP FOR SAFE STRUCTURAL FIREFIGHTING OPERATIONS	Number 24-07AMII
Originating Department MONTGOMERY COUNTY FIRE AND RESCUE SERVICE	Effective Date 12/1/05

STANDARD OPERATING PROCEDURES FOR SAFE STRUCTURAL FIREFIGHTING OPERATIONS

Issued by: **MONTGOMERY COUNTY FIRE AND RESCUE SERVICE**
Policy No. 24-07AMII

Supersedes FRC *SOP for Safe Structure Firefighting Operations*, 1/1/2001
Supersedes and Revokes DFRS Directive #03-13, ***Interim Water Supply***, 10/29/03
Supersedes and Revokes Fire Chief's General Order #05-16,
Tanker Response Change, 9/20/05.

Authority: Montgomery County Code Section 21- 2(d)(4)
Effective Date: December 1, 2005

SUMMARY: Standard response assignments for structure fires help to ensure operational safety, effectiveness, and efficiency. This SOP amends the current standard apparatus dispatch assignments and operating procedures for fire and rescue personnel and units responding to structure fires. From time to time, addenda addressing specific structure firefighting procedures will supplement this SOP.

DEADLINE: Send all comments pertaining to this SOP to Beth Feldman, Montgomery County Fire and Rescue Service, 12th Floor, 101 Monroe Street, Rockville, MD 20850, **by JUNE 15, 2005**. Comments may also be e-mailed to beth.feldman@montgomerycountymd.gov

Section 1. Definitions.

- a. **Apparatus**. Fire and rescue service vehicles, including engines, aerial units, rescue squads, brush trucks, tankers, ambulances (BLS Units), Medic (ALS) Units, and special service units.
- b. **Certified**. Documented proof of an individual's knowledge, skills, and abilities, and determination of competency through a process identified by the Fire Chief, which may include successful completion of testing, evaluation, or practical exercise components, indicating an individual is eligible to serve at a specific rank.



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- c. **Crew**. A group of two or more firefighters, rescuers, and emergency medical services personnel responding to an incident, staffing a specific unit.
- d. **Equipment**. As used in Sections VII through X of this SOP, this term indicates full Personal Protective Equipment (PPE). In an IDLH atmosphere, personnel must use Self Contained Breathing Apparatus (SCBA) with integrated PASS device activated, and crews must carry handlight(s), a portable radio, tools, hose, and other equipment appropriate for the structure's construction and operational tactics.
- e. **Fire Control Room**. An area located in some high rise buildings and shopping malls, equipped as required by National Fire Protection Association (NFPA) Standard 101. This area may include:
 - 1. Voice fire alarm system panel and controls;
 - 2. Fire department two-way telephone communication panel and controls;
 - 3. Fire detection, sprinkler valve, water flow, and alarm annunciation panels;
 - 4. HVAC and elevator location and operation control panels;
 - 5. Emergency generator and fire pump status indicators;
 - 6. Controls for stairway door locking systems; or
 - 7. Controlled-access telephone in public telephone system.
- f. **High Rise Building**. A structure more than five stories in height, or seventy-five feet above the lowest fire department vehicle access.
- g. **Immediately Dangerous to Life and Health (IDLH)**. An atmosphere that poses an immediate threat to life, would cause irreversible adverse health effects, or would impair an individual's ability to escape from a dangerous environment.
- h. **Incident Commander (IC)**. The officer on the scene who is in charge of an incident, and is responsible for making the strategic decisions and assigning other supervisory or functional positions necessary to control an incident. The IC must handle any function or responsibility appropriate to a given incident that has not been delegated to another Command Officer.
- i. **Initial Entry Team (2-in crew)**. A minimum of two personnel who are qualified to participate in interior structure firefighting, one of whose rank must be FF/R III or



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higher. These personnel must maintain constant visual and/or voice contact with each other while entering and operating in a burning structure.

- j. **Integrated Emergency Command Structure (IECS)**. The operational chain of command that provides for the control of emergency incidents by integrating into the command structure all qualified personnel who have met applicable training and experience requirements.
- k. **Interior Structural Firefighting**. The physical activity of performing fire suppression and rescue while inside buildings or enclosed structures that are involved in fire beyond the ignition stage.
- l. **Known Life Hazard**. A circumstance where responding personnel can hear or see a person in distress, or have received reliable information from the Emergency Communications Center or a bystander indicating that a person is in an IDLH atmosphere.
- m. **MAYDAY**. An emergency distress signal indicating that one or more fire/rescue personnel need emergency assistance to escape an IDLH atmosphere, or other life threatening situation.
- n. **PASS Device**. Acronym for the Personal Alert Safety System, a signaling unit that is integrated into the Self-Contained Breathing Apparatus (SCBA).
- o. **Personal Protective Equipment (PPE)**. Equipment consisting of helmet, hood, coat, pants, boots, and gloves that comply with NFPA 1971 Standard, *Protective Ensemble, Structural Fire Fighting*; SCBA that meet NIOSH certification and NFPA 1981 Standard, *Open-Circuit Self Contained Breathing Apparatus for Fire Service*, including the integrated PASS device that complies with NFPA 1982 Standard, *Personal Alert Safety Systems for Fire Fighters*.
- p. **Personnel**. All on-duty career and volunteer firefighter/rescuer and emergency medical service providers.
- q. **PAR**. Acronym for Personnel Accountability Report.
- r. **Rapid Intervention Company (RIC)**. The fourth due engine on a structure fire



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assignment, whose crew consists of at least two personnel, one who is certified as a unit officer, and one who is certified as minimum staffing on an engine, aerial unit, or rescue squad, who are available to rescue an MCFRS member or a team, if necessary.

- s. **Rapid Intervention Dispatch (RID)**. An automatic dispatch of an additional aerial unit, rescue squad, EMS unit (an ALS unit, if one is not already on the fire ground), and a Command Officer, when ECC determines the incident is a working fire, or when units on the scene report a working fire.
- t. **Rapid Intervention Group (RIG)**. A combination of crews consisting of the fourth engine (a RIC) and the units from the RID.
- u. **Rural Area**. For purposes of this SOP, any fire box area in Montgomery County that is not supplied by a municipal water distribution system supporting fire hydrants.
- v. **Standby Team (2-out crew)**. At least two personnel who qualify as minimum staffing on an engine, truck, or rescue squad, who observe the initial two-person team entering an IDLH atmosphere, and are available, trained, and equipped for immediate response to rescue the entry team.
- w. **Stationary Command Post**. A formal Command Post identified by a geographic locator.
- x. **Team**. Two or more personnel who are certified to participate in interior firefighting. One member must be, at a minimum, qualified as a Firefighter I, and the second member must be, at a minimum, qualified as a Firefighter/Rescuer III or higher, in accordance with the MCFRS *Training, Experience, and Credentialing Requirements*.
- y. **Unit**. A specific piece of apparatus staffed by firefighter, rescuer, or emergency medical services personnel. The term "unit" is also used as part of a radio designation for an individual firefighter/rescuer or EMS provider.
- z. **Unit Officer**. The officer in charge of a specific fire, rescue, or EMS unit. To be a unit officer on fire apparatus, personnel must be certified as a Firefighter/Rescuer III or higher rank. To be a unit officer on an ambulance/BLS (Basic Life Support) Unit, an EMS Provider must be certified as an EMT-B. To be a unit officer on a Medic



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Unit/MICU (Mobile Intensive Care Unit) or ALS (Advanced Life Support) Unit, an EMS Provider must be certified as an EMS Provider/Paramedic or ALS Provider.

Section 2. Applicability. This SOP was developed in cooperation with all components of the MCFRS, including the International Association of Fire Fighters Local 1664, and the Local Fire and Rescue Departments. It applies to all Montgomery County Fire and Rescue Service **personnel**.

This SOP generally applies to structural firefighting operations. Section 4. I., Initial Operations, applies to all incidents where an **IDLH** atmosphere exists.

Section 3. Policy. MCFRS requires the use of Standard Operating Procedures for mitigating structure fires. All fire and rescue service **personnel** must use safe and efficient procedures on all structure fire incidents.

Section 4. Procedures.

I. INITIAL OPERATIONS

- a. All **personnel** who are prepared to work at the scene of a structure fire must wear full **PPE** and carry hand lights and other tools appropriate for their assigned position. In **IDLH** atmospheres, SCBA must be used and **PASS devices** must be activated.
- b. The requirements of 29 CFR 1910.134, *Respiratory Protection Program*, may be met by forming a **Standby Team** outside as the **Initial Entry Team** enters a structure where an **IDLH** atmosphere may exist, or by performing exterior functions until the **Standby Team** or **RIC** is operational.
- c. To meet the **IDLH** atmosphere entry requirements of 29 CFR 1910.134, *Respiratory Protection Program*:
 1. An **Initial Entry Team** must be formed before entering an interior structural fire where an **IDLH** atmosphere exists.
 2. A **Standby Team** prepared to rescue the **Initial Entry Team** must form outside the **IDLH** atmosphere before the **Initial Entry Team** enters the structure. The **Initial Entry Team Officer**, normally the officer of the first arriving engine, must



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assign this responsibility to:

- A. A **certified EMS crew** that is qualified for **Standby Team** assignment;
 - B. **Certified personnel** from additional arriving **units** (engines, aerial units, and rescue squads);
 - C. **Certified personnel** on the first arriving **unit** who exceed minimum staffing (i.e., a **unit** staffed with four or more **personnel**); or
 - D. Any other combination of **certified personnel** who are qualified for **Standby Team** assignment
3. One of the members of the **Standby Team** must maintain contact with the **Initial Entry Team** visually, verbally, or by radio.
 4. The second member of the **Standby Team** may be assigned to other activities, but must wear **PPE**, have SCBA immediately available, and must be able to respond immediately to assist in rescuing the **Initial Entry Team**, if required. This member must not be assigned to functions that would further endanger the **Initial Entry Team** if he/she abandoned those operations to assist in rescuing them.
 5. If the **Initial Entry Team** requires assistance/rescue while the **Standby Team** is in place, the **Standby Team** must inform Command or the ECC of the situation and its plan of action. Both **Standby Team** members will assist the **Initial Entry Team** if it can be done safely.
 6. Any **unit** assigned as the **Standby Team** must be prepared to carry out its pre-assigned job task in accordance with this SOP, or, once it has been relieved by the **RIC**, be prepared to be redeployed by the **IC**.
- d. A **unit** arriving at an **interior structural fire** where an **IDLH** atmosphere exists must not begin interior operations if a **Standby Team** is not available. Before a **Standby Team** is in place, the initial **crew** may prepare the structure for entry. This **crew** may perform appropriate exterior operations including, but not limited to:



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1. Exposure protection;
2. Exterior attack;
3. Stretching attack lines to the boundary of the **IDLH** atmosphere; or
4. Controlling utilities, i.e., outside gas shut-off.

EXCEPTION: If arriving **personnel** find a **known life hazard** and immediate action may prevent the loss of life or serious injury, the **crew** may begin appropriate interior operations without a **Standby Team** in place. Once the **known life hazard** has been resolved, **personnel** must withdraw until a **Standby Team** or **RIC/RIG** has been assembled

- e. If the initial arriving **Unit Officer** determines that initial operations must begin in an **IDLH** atmosphere before establishing the **2-out crew**, he/she must make a radio announcement identifying the **units** involved, their mission, and their location in the **IDLH** atmosphere. ECC must repeat this announcement to the responding companies and Command Officer. This action is authorized only when a known rescue situation exists and the **2-out** requirement has not been met.
- f. The rationale for abating the **Standby Team** must be fully documented on the Incident Report.
- g. When interior firefighting operations are significantly delayed because the **2-out** requirement has not been met, the circumstances must be fully documented on the Incident Report.

II. RAPID INTERVENTION.

- a. The fourth due engine will function as the initial **RIC** on all structure fires, unless the **IC** specifically orders it to take another assignment.
- b. The **RIC** will relieve the **Standby Team** when it arrives on the fire ground, and the **Standby Team** will carry out its SOP assignment or be redeployed by the **IC**. The **RIC** must be on the fire ground, positioned to relieve the **Stand-by Team**. The preferred relief is face-to-face. During large-scale incidents, relief may take place by radio.
- c. The **RID** will be dispatched when a working incident is identified by **ECC** or a **unit** on the scene. The **RID** includes: one aerial unit, one rescue squad, one EMS unit (ALS,



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if one is not already on the fire ground), and one Command Officer. To ensure that adequate resources remain available for other incidents, not more than two rescue squads should be dispatched to one structure fire incident, unless specifically requested by the **IC**.

- d. **Units** from the **RID** will combine with the **RIC** to form the **Rapid Intervention Group**.
- e. The **RIG** must be located where it can rapidly assist **personnel** engaged in firefighting operations. This may be: at the Command Post for a house fire; at the primary entryway for a commercial or multi-family occupancy; one floor below the fire in a **high rise structure**; or as assigned by the **IC**.
- f. When stationed on the exterior, the **RIG** must be outside the collapse zone, and must be able to maintain a view of the structure to observe its collapse potential, or the potential for other catastrophic events.
- g. The **RIG** must monitor all critical operational radio talk groups in use at the incident, including the Fire Department Talk Around (FDTA) channel, and must know the location of **crews** operating in/on the structure. The **RIG** officer should communicate to Command any need for additional **units** and/or special **equipment** to support the rapid intervention mission.
- h. **RIG** members must be equipped to protect or rescue operating **personnel**. Appropriate **equipment** includes, but is not limited to: a portable radio; full **PPE** on and in place; hose line(s) ready (charged or uncharged, depending on the **RIG's** location); Thermal Imaging Camera; rope; and any other tools and **equipment** appropriate for the operation.

NOTE: Maryland Occupational Safety and Health (MOSH) requirements for a **Standby Team** are not abated by the arrival of additional **units**. However, transition to the NFPA 1500 *Rapid Intervention Company* (RIC) terminology and functions meets this requirement, and ensures that a rescue team is appropriately equipped and suitably stationed to perform its duties.

- III. **MAYDAY.** This section describes: conditions that warrant a declaration of **MAYDAY**; how to declare a **MAYDAY**; and the actions taken by the **IC** after a **MAYDAY** is declared.



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- a. All **personnel** must be able to recognize dangerous situations where they, or their **crew**, may be in trouble. **Personnel** must declare a **MAYDAY** when:
 1. a firefighter has become entangled, trapped, or pinned;
 2. **personnel** have fallen through a roof or floor and cannot be accounted for or have become injured;
 3. **personnel** are caught in a flashover;
 4. **personnel** are off a hose line or tag line in a large/open area with zero visibility;
 5. a low air alert activates, and **personnel** cannot immediately find an exit; or
 6. a firefighter believes the safety of a **crew** or a **crew** member may be at risk.
- b. When a **MAYDAY** has been declared, the **IC** will request ECC to sound the pre-alert tone and switch all **units**, except the **MAYDAY personnel**, the **IC** or the **IC's** designee, and the **RIG**, to an alternate talk group. If the **IC** does not acknowledge a **MAYDAY**, any **unit** hearing the call must alert the **IC** of the **MAYDAY**. The **IC** will try to determine the exact location of the **MAYDAY personnel**, and order the **RIG** to intervene as necessary.
- c. When the **MAYDAY** is transmitted on FDТА, the **IC** or the **IC's** designee, and the **RIG** will switch to FDТА.
- d. **Procedures for a Firefighter to Declare a MAYDAY**
 1. The most important actions a firefighter can take when recognizing a **MAYDAY** situation is to activate the **PASS** device and inform Command of the **MAYDAY** immediately, using the acronym **LUNAR** to advise:

L = Location and situation of **MAYDAY** personnel
U = Unit number and the personnel position indicator (e.g., E61-C)
N = Name of firefighter



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A = Air supply situation
R = Resources needed

- Optimal Action:** If it is necessary to declare a **MAYDAY**, the best action sequence is for the firefighter to quickly access and press the **Emergency Button (EB)** on his/her portable radio, verbally transmit “**MAYDAY, MAYDAY, MAYDAY,**” and then verbally transmit the **LUNAR** information. This sequence activates the Ruthless Preemption and **EB** features of the 800 MHz radio system. However, if the **MAYDAY personnel** cannot readily access the **EB**, he/she should immediately verbally transmit the **MAYDAY** call, and when possible, activate the **EB**.

EXAMPLE: Firefighter presses the **EB** on the portable radio and transmits “E191 to Command, “**MAYDAY, MAYDAY, MAYDAY**, E191-B and E191-C are trapped on the second floor, quadrant B. This is Captain X and Firefighter Y – we are low on air and trapped under a collapsed roof.”

NOTE: By first pressing the **EB**, a firefighter with a **MAYDAY** activates the Ruthless Preemption feature of the 800 MHz radio, ***enabling that radio to override all other voice transmissions on that talk group.***

EXAMPLE: The firefighter cannot access the **EB**. The firefighter immediately pushes the PTT (push to talk) and transmits “E61B to Command , **MAYDAY, MAYDAY, MAYDAY**, E61-B and E61-C have fallen through the floor into the basement, quadrant A, fire in the basement, Captain X and Firefighter Y. We have air, but are injured and can’t move. We need a hose line right away to protect us.” When the trapped firefighters can orient their radio to activate the **EB**, they should attempt to do so.

- When an **EB** is activated with **no** follow-up voice transmission, ECC will notify Command of the activation. Command will make one attempt to contact the firefighter verbally. If the firefighter does not acknowledge this attempt, the firefighter will be considered a **MAYDAY**.
- Witnessed Report.** A witnessed report is an occurrence where **personnel** witness, and then declare a **MAYDAY** in an emergency, including: a person or persons trapped; a fall through a roof or floor;



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firefighters caught in a flashover, etc.

5. A firefighter who is not accounted for in a **PAR** will be declared **MAYDAY**.

e. When a **MAYDAY** occurs, **personnel** should follow the procedures below:

1. All other **units** must continue their assigned operation, unless the **IC** directs otherwise. Direct knowledge of the **MAYDAY** situation should be transmitted to the **IC** through the Command structure.
2. The **IC** or the **IC's** designee will assign the **RIG** and any other resources necessary to rescue the **MAYDAY personnel**. If the **IC** or the **IC's** designee cannot determine the exact location of the **MAYDAY personnel**, the **RIG** should be sent to their last known location.
3. Once all **units** (except the **MAYDAY personnel**, the **IC** or the **IC's designee**, and the **RIG**) have switched to an alternate talk group, Command will conduct a **PAR** by beginning with the divisions/groups operating in the most hazardous locations. Divisions/Groups that do not report after two attempts will be considered **MAYDAY**, and Command will follow procedures 1.-3. of this Section 4.III.e.

NOTE: If Divisions and Groups have not been assigned, the **PAR** will be by **unit**.

4. The **IC** will announce to all operating **units** and ECC when the incident has stabilized and operations have returned to normal.

IV. SIZE-UP AND INITIAL COMMUNICATIONS. Timely and effective communications are necessary as companies engage in structural firefighting operations. The three components to these reports include: Water Supply Instructions; Initial On-Scene Reports (IOSR); and Situation Reports.

- a. The first and third engine **crews** and other appropriate **units** will give water supply instructions by radio while en route.
- b. The first arriving **unit** will give an IOSR, including:



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1. the arrival side of the building;
 2. the number of its stories;
 3. the type of its occupancy;
 4. conditions evident on arrival, with associated geographic location, using *Incident Command System* terminology;
 5. a request for additional resources (example: a call for the **RID**); and
 6. if deviating from the SOP, designating other **unit** assignments.
- c. The first arriving **unit** to the side of the building opposite the first **unit** will give an IOSR, including:
1. the number of stories on that side of the building; and
 2. conditions evident with the associated geographic location, using *Incident Command System* terminology.
- d. After the initial size-up, the first arriving **unit** will: give a situation report; advise other companies what the initial actions will be; designate the **Stand-by Team** and the point of entry; and indicate the Command mode.
- e. **Control of Communications for Task Force or Greater Alarm Fires.** To maintain control of radio traffic on primary tactical talk groups, ECC will assign all **apparatus** dispatched on task force or greater alarms to a talk group separate from the incident's main talk group.
1. **Units** responding on task force or greater alarms must monitor their assigned talk group, and not transmit on the tactical talk groups in use until assigned to the incident.
 2. **Units** assigned on task force or greater alarms will stage, unless they are given specific orders by the **IC** or Section Chief. The first due engine on the greater alarm will become the Staging Manager, in the absence of



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a Command Officer. The Staging Manager will be the only **unit** (person) to communicate with Command from the staging area.

V. INITIAL COMMAND. To establish command and control of the fire ground before the arrival of a Command Officer, and engage in critical tactical operations, the first arriving **Unit Officer** will operate in one of the Command Modes indicated below. The Command Mode must be announced as the **unit** engages in operations.

- a. **Investigative Mode.** In this Command Mode, the first due officer has Command by radio while investigating.
- b. **Attack Mode.** In this Command Mode, the situation found on arrival requires immediate action. The company officer's assistance is required, and that officer must be directly involved with the attack. The company officer will supervise the **crew**, and will have Command responsibility by portable radio. This Command Mode is limited to a few minutes, and will end when:
 1. the situation is stabilized; or
 2. the situation is not stabilized, but the company officer withdraws to the exterior and establishes a **Stationary Command Post**; or
 3. Command is transferred to another company officer or to a Command Officer.

VI. TRANSFERRING THE INITIAL COMMAND TO A COMMAND OFFICER.

A Command Officer will establish a formal Command Post on all structure fire assignments where five or more **units** are operating on the fire ground. The transfer to a formal Command Post is made in one of the ways indicated below.

- a. The first arriving Command Officer will assume Command by radio when **units** are operating in either Investigative or Attack Mode. The first arriving Command Officer will communicate by radio with the **Unit Officer** who has Command, receive a situation report, and then assume **Stationary Command Post** operations. If the first arriving Command Officer cannot contact the **Unit Officer** with Command either face to face or by radio, the first arriving Command Officer will assume Command, and announce this assumption of Command by radio.



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- b. Command can be passed **only once** from **Unit Officer** to **Unit Officer**. On the arrival of the first arriving Command Officer, that officer will assume Command, either by radio, or face-to-face. All other transfers of Command will be made face-to-face at the Command Post.
- c. A company officer in charge of the **Standby Team** can perform the Command function until the arrival of a Command Officer.

VII. STRUCTURAL FIRE ASSIGNMENT. The standard dispatch for a structure fire (except a shed or detached garage) is five engines, two aerial units, one rescue squad, one EMS **unit**, and four Command Officers. At least two Command Officers must respond on the assignment. All **personnel** must use the procedures below during structure firefighting operations. **Personnel** must not take action until their **Unit Officer** in charge directs them to do so. All drivers who are not specifically assigned to **apparatus** operations will assemble with their **crew**. **Fire ground discipline is critical during all incident responses.** In addition to the listed responsibilities, **Unit Officers** must maintain **crew** integrity, ensure that **personnel** and **apparatus** take their assigned positions, and follow this and other applicable policies, including the MCFRS *Incident Command System*. The **IC** may modify these assignments as necessary.

Crews responding on a reduced assignment of two engines and a special service will follow the SOP for the first two engines and the first special service indicated below.

a. First Due Engine

- 1. **Unit.** Initiate water supply by laying a supply line from the most suitable hydrant, or beginning a split lay. Position the engine on Side A, reserving adequate space for the aerial unit to position. Connect to the building standpipe and/or sprinkler system, if so equipped, on or closest to Side A. If the first due engine is required to position elsewhere, this must be reported immediately to all other responding **units** and Command Officers.

2. **Unit Officer.**

- A. Provide water supply instructions by radio while en route to the



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incident location.

B. On arrival, give reports as required in Section 4.IV. of this SOP.

C. Follow the **IDLH** operations provisions of this SOP.

3. **Crew.** Advance a hand line to the fire floor and begin fire attack/confinement, with attack line placement to best support the search function.

4. **Equipment.** Includes SCBA, portable radios, tools, hose, and other **equipment** appropriate for the structure's construction and operational tactics.

b. **Second Due Engine**

1. **Unit.** Ensure and expand upon the water supply as necessary for the first due engine, by connecting to the hydrant and improving the intake pressure of the first due engine, and/or laying additional supply lines as necessary.

2. **Crew.** Advance a hand line and back up the first due engine.

3. **Equipment.** Includes SCBA, portable radios, tools, hose, and other **equipment** appropriate for the structure's construction and operational tactics.

c. **Third Due Engine**

1. **Unit.** Initiate water supply by laying a supply line from an unused hydrant, when possible, or beginning a split-lay to Side C. Position the **unit** to reserve adequate space for aerial unit positioning. Connect to the building's standpipe/sprinkler system on or closest to Side C.

2. **Unit Officer.**

A. Give water supply instructions by radio while en route to the incident location.

B. On arrival, give reports as required in Section 4. IV. of this SOP.



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<p>3. <u>Crew.</u> Advance a hand line to the floor above the fire floor, or the exposure most threatened by horizontal extension, and initiate operations. Check the basement and the floors below the fire while en route to the floor above.</p> <p>4. <u>Equipment.</u> Includes SCBA, portable radios, tools, hose, and other equipment appropriate for the structure's construction and operational tactics.</p> <p>d. Fourth Due Engine</p> <p>1. <u>Unit.</u> Ensure, and as necessary, expand upon the water supply for the third due engine by connecting to the hydrant and improving the intake pressure of the third due engine, and/or laying additional supply lines as necessary.</p> <p>2. <u>Crew.</u></p> <p>A. Report to the IC and advise that you are the RIC; unless specifically ordered otherwise, assume the operations of the RIC.</p> <p>B. Secure an additional hose line and immediately relieve the Standby Team to become the RIC. This is usually done face-to-face, but on larger scale incidents, it may be done by radio.</p> <p>C. Determine the location of the fire and its progression.</p> <p>D. Monitor all critical operational talk groups and the FDТА channel.</p> <p>E. Observe fire conditions, note the progress of the fire attack, and know the location of companies working in the building.</p> <p>F. Determine the occupancy type and building construction.</p> <p>3. <u>Equipment.</u> Includes SCBA, portable radios, tools, hose, and other equipment appropriate for the structure's construction and operational tactics, and any additional equipment specific to the RIC function.</p>	



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e. **Fifth Due Engine**

1. **Unit.** Position in an unassigned and uncommitted location to avoid impeding responding or departing **apparatus**.
2. **Crew.** Report to the **IC** for assignment; do not engage in any job task until assigned by the **IC**.
3. **Equipment.** Includes SCBA, portable radios, tools, hose, and other **equipment** appropriate for the structure's construction and operational tactics.

f. **First Due Aerial Unit**

1. **Unit.** Position on Side A.
2. **Crew:**
 - A. Perform rapid outside horizontal ventilation coordinated with the fire attack.
 - B. If necessary, perform initial forcible entry for the first due engine.
 - C. Provide secondary exit(s) for interior **crews** with ground and/or aerial ladders on buildings more than one story high.
 - D. After completing the duties outlined above, report to the fire floor. Initiate or assist the assigned rescue squad with search and rescue. Begin checking for extension by opening concealed spaces as necessary after the bulk of the fire has been extinguished.
 - E. Support the fire attack by providing lighting, and perform ventilation, overhaul, and salvage operations.
3. **Equipment.** Includes SCBA, portable radios, tools, hose, and other **equipment** appropriate for the structure's construction and operational tactics.



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1. **Unit.** Position on Side C.
2. **Crew.**
 - A. Assist first due aerial unit with outside horizontal ventilation that is coordinated with, and supports, the fire attack plan.
 - B. Perform initial forcible entry as necessary for the third due engine.
 - C. Provide secondary exit(s) for interior **crews** with ground and/or aerial ladders for buildings more than one story high.
 - D. Provide vertical ventilation when ordered or approved by the **IC**.
 - E. After completing the duties outlined above, report to the floor above the fire. Initiate or assist the assigned rescue squad with search and rescue on that floor. Begin checking for extension by opening concealed spaces as necessary after the bulk of the fire has been extinguished.
 - F. Support the fire attack by providing lighting, and performing ventilation, overhaul, and salvage operations.
3. **Equipment.** Includes SCBA, portable radios, tools, hose, and other **equipment** appropriate for the structure's construction and operational tactics.

h. Rescue Squad

1. **Unit.** Position to avoid impeding responding or departing **apparatus**.
2. **Unit Officer.** Report to the **IC** or division/group supervisor as soon as the primary and all subsequent secondary searches are completed and utilities are controlled.
3. **Crew:** Ensure completion of a systematic search of the building; control the building's utilities and assist, in coordination with the assigned aerial units, with



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ventilation, overhaul, and salvage activities.

4. **Equipment**. Includes SCBA, portable radios, tools, hose, and other **equipment** appropriate for the structure's construction and operational tactics.

i. **Ambulance or MICU**

1. **Unit**. Position on Side A, assuring that the vehicle can leave the fire ground if necessary. The vehicle does not have to be included in the aid station.
2. **Crew**. Establish an aid station on Side A.
3. **Equipment**. All **units** must carry a litter, oxygen equipment, first aid kit, a burn kit, and ALS **equipment** (MICU only). If the **crew** is used as a **Standby Team**, all **personnel** must wear full **PPE** and carry hand lights.

j. **Incident Commander**

1. **Unit**. Normally, position on Side A, allowing space for the engine, aerial **unit**, and rescue squad to implement tactical operations.
2. **Officer**. Establish a Command Post and assume Command of the incident scene, in accordance with Section 4.VI. of this SOP and the MCFRS *Incident Command System*.
3. **Equipment**. Wear appropriate identifier vest and have immediate access to full **PPE** and **SCBA**.

k. **Additional Command Officers**

1. **Unit**. Position vehicles to allow access of responding engines, aerial **units**, and rescue squads.
2. **Crew**. Report to the **IC** for assignment.
3. **Equipment**. Wear appropriate identifier vest and have immediate access to full **PPE** and **SCBA**.



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The standard dispatch for a structure fire in a non-hydranted area is five engines, two aerial **units**, one rescue squad, three tankers, one EMS **unit**, and four Command Officers. Three Command Officers is the minimum Command Officer response. This Section of the SOP establishes a procedure for structure firefighting in areas of the County that lack fire hydrants close to the fire. The procedure is a modification of the SOP for hydranted areas, and emphasizes supporting the fire attack of the initial arriving engine, with an uninterrupted, expandable water supply using rural water supply tactics.

NOTE: **Units** arriving on a scene where large diameter hose (LDH) is deployed should move the LDH to the side of the road, driveway, etc., before charging the line.

a. First Due Engine

1. **Unit.** Initiate the water supply process by laying a supply line connected to the **unit's** clappered Siamese. This hose lay must begin at the driveway entrance to the involved structure, or from the nearest area suitable for dump site operations. The location of this site must be identified in the **unit's** on-scene report.

2. **Unit Officer.**

- A. Determine and advise whether a tanker shuttle or relay operation will be implemented for the water supply. Advise the water source for the shuttle or relay operation so the fifth due engine can position there and establish a fill site or relay water source.

NOTE: If the water source is accessible and located within 3000 feet of the first engine's Siamese, a relay operation is the preferred water supply option.

- B. Direct other incoming engines and tankers to support the initial attack until a water shuttle or water relay is developed.
- C. On arrival, give reports in accordance with Section 4.IV. of this SOP.



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D. All firefighting operations must adhere to the requirements of Section 4.I. of this SOP.

3. **Crew.** Advance a hand line to the fire floor and begin fire attack/confinement actions.
4. **Equipment.** Includes SCBA, portable radios, tools, hose, and other **equipment** appropriate for the structure's construction and operational tactics.

b. **Second Due Engine**

1. **Unit.** Position the engine close to the attack pumper, and supply tank water to the attack pumper as necessary. Leave clear access to the driveway for the first arriving tanker and aerial **unit**.

NOTE: As the second due engine positions, the **crew** may need to move the supply line(s) from the middle of the road or driveway.

2. **Unit Officer.** Quickly assess the availability of a water source, e.g., a swimming pool or a pond near the involved structure.
3. **Crew.** Advance a hand line and back up the first due engine.
4. **Equipment.** Includes SCBA, portable radios, tools, hose, and other **equipment** appropriate for the structure's construction and operational tactics.

c. **Third Due Engine**

1. **Unit.** Position the engine to allow the first tanker and the first aerial **unit** to position close to the structure, while best positioning either for dump site, or relay operations, as directed.

A. **For Dump Site Operations:** Position the **unit** to draft from folding tank(s). This position must allow the pumper to draft from the folding tanks, and enable the tankers to fill the folding tanks, preferably using their side dumps.



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Connect to the clappered Siamese and leave the supply line uncharged until ordered to charge. Try to enable first due tanker and aerial **unit** to position close to the structure before charging the supply line.

B. **For Relay Operations:** Position as necessary to initiate the relay.

2. **Unit Officer.** Place into operation the initial dump site operations, or perform relay operations.
3. **Crew.** Manage dump site operations.
4. **Equipment.** Includes SCBA, portable radios, tools, hose, and other **equipment** appropriate for the structure's construction and operational tactics.

d. **Fourth Due Engine**

1. **Unit.** Locate in an uncommitted position. The **unit** may be directed to:
 - A. operate as a draft pumper to support the initial attack from a static water source; or
 - B. begin laying supply lines for water relay operation, as directed.
2. **Driver.** Be prepared to pump water to the clappered Siamese to support the attack pumper, and stand by for instructions from the WSGO. Be prepared to assist the driver of the third due engine to create a dump site.
3. **Crew.**
 - A. Report to the **IC** and advise you are the **RIC**. Unless specifically ordered otherwise, assume the operations of the **RIC**.
 - B. Secure an additional hose line and immediately relieve the **Standby Team** to become the **RIC**. This is usually done face-to-face, but on larger scale incidents, it may be done by radio.



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- C. Determine the location of the fire and its progression.
- D. Monitor all critical operational talk groups and the FDTA channel.
- E. Observe fire conditions, note fire attack progress, and know the location of crews working in the building.
- F. Determine the occupancy type and building construction.

- 4. **Equipment.** Includes SCBA, portable radios, tools, hose, and other **equipment** appropriate for the structure's construction and operational tactics, and any additional **equipment** specific to the **RIC** function.

e. **Fifth Due Engine**

- 1. **Unit.** Establish the first fill site; do not respond directly to the scene.
- 2. **Unit Officer.** Place into operation the initial fill site or relay water source as identified.
- 3. **Crew.** For fill site operations, set up at least two LDH supply lines with quarter-turn ball valves attached, capable of filling tankers at a minimum rate of 500 GPM each. Maintain fill site operations, and establish water supply connections for incoming **apparatus**.
- 4. **Equipment.** Includes SCBA, portable radios, tools, hose, and other **equipment** appropriate for the structure's construction and operational tactics.

f. **First Due (Nurse) Tanker**

- 1. **Unit.** If staffing permits, drop off portable tank at the end of the driveway or near the clappered Siamese. Position the **unit** near the first due engine and connect the supply line to the tanker, and from the tanker to the first arriving engine. Supply the first due engine with tank water, and transition to supplying water from the dump site or relay source as one becomes established. Try to maintain a full tank of water in case the supply is interrupted



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2. **Crew.** Assist the driver with water supply operations.

g. **Second Due Tanker**

1. **Unit.** The primary responsibility for this **unit** is to support the fire attack by immediately pumping the Siamese, and continuing to pump the Siamese until it runs out of water.

The tanker will leave its folding tank and all appropriate appliances to be used in developing dump site operations at the dump site.

If the third engine is not in a position to set up the dump site, the second tanker should supply the Siamese from a position that allows the third engine and third tanker access to the dump site.

2. **Crew (if staffing is available).** Assist the driver with water supply operations.

h. **Third Due Tanker**

1. **Unit.** Support the fire attack by pumping the Siamese until the dump site is operating.

If the third due engine is in position to begin development of the dump site, the third due tanker should position to set up the folding tank and dump enough water for the third due engine to achieve a draft. If the third due engine is successful in drafting, then transition can be made from tankers supplying the Siamese to the third due engine supplying the Siamese from folding tanks. When the third due engine is successfully drafting, dump remaining water into the folding tank and move to the fill site.

If in relay operations, support the Siamese until the relay is in service.

2. **Crew (if staffing is available).** Assist the driver with water supply operations.

i. **First Due Aerial Unit**

1. **Unit.** Position on Side A, or in the area of highest priority to accomplish rescue



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operations. Provide roof access/egress, or deploy a defensive, elevated stream. If this location impedes incoming water supply **units**, position the **unit** elsewhere, e.g., in an adjoining driveway.

2. **Crew**. Perform duties outlined in Section 4.VII.f. of this SOP.
3. **Equipment**. Includes SCBA, portable radios, tools, hose, and other **equipment** appropriate for the structure's construction and operational tactics.

j. **Second Due Aerial Unit**

1. **Unit**. Position on the main road, or in a location that does not impede the access/egress of tankers.
2. **Crew**. Perform duties outlined in Section 4.VII.g. of this SOP.
3. **Equipment**. Includes SCBA, portable radios, tools, hose, and other **equipment** appropriate for the structure's construction and operational tactics.

k. **Rescue Squad**

1. **Unit**. Position on the main road, or in a location that does not impede the access/egress of tankers.
2. **Crew**. Perform duties outlined in Section 4.VII.h. of this SOP.
3. **Equipment**. Includes SCBA, portable radios, tools, hose, and other **equipment** appropriate for the structure's construction and operational tactics.

l. **Ambulance or MICU**

1. **Unit**. Position at the incident scene to facilitate the positioning of other **apparatus**.
2. **Crew**. Establish an aid station on Side A.
3. **Equipment**. All **units** must carry a litter, oxygen **equipment**, first aid kit, a



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burn kit, and ALS **equipment** (Medic **Unit** only). If the **crew** is used as a **Standby Team**, all **personnel** must wear full **PPE** and carry hand lights.

m. **First Arriving Command Officer**

1. **Unit.** Position on Side A, leaving room for additional **apparatus**.
2. **Officer.** Establish a Command Post and assume Command of the incident scene in accordance with Section 4.V. of this SOP. Once a formal Command Post has been established, assign a WSGO as soon as possible.
3. **Equipment.** Wear appropriate identifier vest and have immediate access to full **PPE** and SCBA.

n. **Water Supply Group Officer.** Locate available water sources and position to coordinate water supply operations. The Water Supply Group should operate on a separate talk group.

o. **Water Supply Task Force.** Upon the indication of a working structure fire in a non-hydranted area, or at the request of the **IC**, ECC will dispatch a Water Supply Task Force consisting of one additional engine and three additional tankers.

p. **Water Supply Task Force Engine**

1. **Unit.** Report to and develop the second designated fill site location as directed by the WSGO.
2. **Crew.** Set up at least two LDH supply lines with quarter-turn ball valves attached, capable of filling tankers at a minimum rate of 500 GPM each. Maintain the fill site operation; establish water supply connections for incoming **apparatus**.
3. **Equipment.** Wear appropriate **PPE** for fill site operations.

q. **First Due Tanker from Water Supply Task Force**

1. **Unit.** Support the fire attack by supplying the clappered Siamese, or by



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dumping into the portable tanks at the direction of the WSGO. Drop off the portable tank, water, and appliances as directed; proceed to the fill site.

2. **Crew (if staffing is available).** Assist the driver with water supply operations.

r. **Second Due Tanker from Water Supply Task Force**

1. **Unit.** Support the fire attack by supplying the clappered Siamese, or by dumping into the portable tanks at the direction of the WSGO. Drop off the portable tank, water, and appliances as directed; proceed to the fill site.
2. **Crew (if staffing is available).** Assist the driver with water supply operations.

s. **Third Due Tanker from Water Supply Task Force**

1. **Unit.** Support the fire attack by supplying the clappered Siamese, or by dumping into the portable tanks at the direction of the WSGO. Drop off the portable tank, water, and appliances as directed; proceed to the fill site.
2. **Crew (if staffing is available).** Assist the driver with water supply operations.

IX. **OPERATIONS AT HIGH RISE STRUCTURE FIRES. (Generally follow same SOPs as Section VII., Structure Fire Assignment.)** This Section directs operational activities on the scene of emergency incidents in **high rise structures**. The standard dispatch is five engines, three aerial **units**, one rescue squad, one EMS **unit**, and four Command Officers. Three Command Officers is the minimum Command Officer response. All **personnel** must use the procedures below when responding to a **high rise structure** fire.

DIVISION/GROUPS IN HIGH RISE BUILDING INCIDENTS. In addition to the divisions/groups normally used in the MCFRS *Incident Command System*, the division/groups below may be useful during **high rise building** incidents. The **IC** should request additional **units** to adequately support the suppression/emergency operation, and to cover the required division/groups and support functions.

- a. **Building Access/Use of Knox Box.** If a Knox Box is available, **unit personnel** will use the access key to open it, remove one set of keys, and re-lock the Knox Box.



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<ol style="list-style-type: none">1. Access keys must not be left in the Knox Box, nor may the Knox Box be left open under any circumstances.2. The keys are color coded and labeled:<table><tr><td>Main Entrance Doors</td><td>Green Tag</td></tr><tr><td>Fire Control Room</td><td>Blue Tag</td></tr><tr><td>Elevator Control</td><td>Red Tag</td></tr><tr><td>Boiler/HVAC Control Room</td><td>Yellow Tag</td></tr><tr><td>Other keys (roof, et. al.)</td><td>Black-labeled Tag</td></tr></table>3. The first arriving unit officer must ensure that all keys have been returned to the Knox Box at the conclusion of the incident. <p>b. Stairways. Identify, establish, and maintain stairways as safe corridors of operation to be used as main evacuation/escape routes and fire attack points. When using stairways as fire attack points, consider evacuating the upper floors by a different stairway.</p> <ol style="list-style-type: none">1. The first arriving engine company will designate the stairway to be used for fire attack and advise the IC.2. The IC should immediately try to identify and communicate both the preferred evacuation route, and the evacuation shelter location. <p>c. Location Unknown Procedure. If the location of the fire/emergency is unknown or uncertain, the first arriving engine and special service will use the stairway to check the building, beginning on the lowest floor and moving upward. PERSONNEL MUST NOT USE ELEVATORS UNDER THIS CONDITION.</p> <p>d. Elevator Procedures. Avoid the use of elevators whenever possible. Individuals who are not emergency service providers must not ride elevators under actual or potential fire conditions. Personnel must:</p> <ol style="list-style-type: none">1. note the location of the nearest stairwell before entering an elevator;		Main Entrance Doors	Green Tag	Fire Control Room	Blue Tag	Elevator Control	Red Tag	Boiler/HVAC Control Room	Yellow Tag	Other keys (roof, et. al.)	Black-labeled Tag
Main Entrance Doors	Green Tag										
Fire Control Room	Blue Tag										
Elevator Control	Red Tag										
Boiler/HVAC Control Room	Yellow Tag										
Other keys (roof, et. al.)	Black-labeled Tag										



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<ul style="list-style-type: none">2. note the location and method of operation of the emergency stop switch, if available;3. wear full PPE and SCBAs with the cylinder valve open and face pieces on, with the regulator in hand for rapid connection;4. connect the regulator if the elevator car fails to stop at the midway point; and5. confine the operation of the elevator to upper floors between entry level(s) and at least two floors below the fire, until the fire is under control and the IC has suspended this restriction. <p>e. Elevators must not be used in Independent Service mode under fire conditions. <i>FIRE AND RESCUE PERSONNEL MUST NOT USE ELEVATORS:</i></p> <ul style="list-style-type: none">1. if fire, smoke, or heat is detected in the hoist way or elevator shaft or reported in the elevator machine room;2. if Fireman's Service is unavailable, or cannot be confirmed as operating reliably; or3. on any incident that is located or reported on or below the fifth floor. <p>f. When Fireman's Service mode is confirmed to be usable, the unit officer must:</p> <ul style="list-style-type: none">1. check the shaft for evidence of fire, smoke, or heat before boarding the elevator;2. ensure the elevator is not overcrowded;3. ensure that at least one crew member has a portable radio and forcible entry tools; and4. stop the elevator car at a point midway to test the Fireman's Service operation, check orientation, and re-check the shaft for fire, smoke, or heat. <p>g. Ventilation Procedures. The ventilation procedures below apply to personnel</p>	



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during **high rise building** incidents:

1. Immediately ventilate stairwells that are charged with smoke, using hatches and bulkhead doors. Initially try to ventilate all stairwells; then pressurize those stairwells used for occupant evacuation.
2. Use smoke ejectors, blowers, and positive pressure units to channel smoke and pressurize stairwells. Consider establishing a Ventilation Group, and place that Group on a separate radio talk group when appropriate.
3. Until specific operational information on the air handling systems and their effects on the smoke and fire is known, the **IC** should consider shutting down the air handling systems to curtail the spread of fire, smoke, and toxic gases throughout the building. When possible, the **IC** should consult with the building engineer before shutting down, activating, or reactivating any portion of this system.
4. Notify all Division and Group supervisors before reactivating the system, and carefully monitor the air and smoke within the building. Monitor Interior Staging areas or other operational areas inside the building for possible carbon monoxide accumulation.
5. Recognize that breaking glass to ventilate the upper floors of a **high rise building** is extremely dangerous, and should be done only as a last resort, preferably after warning is given.

h. **Lobby Control Group**. At **high rise building** fires, this Group is responsible for:

1. securing the lobby area, and ensuring that all elevators are returned to the lobby area or the designated floor; and
2. acquiring information needed by the **IC**, including: floor plans and approved evacuation plans; type of occupancy; a list of disabled occupants, their names and phone numbers, for building engineers and building management; information concerning the HVAC, utilities, mechanical rooms, and fire pumps; any unusual conditions; and items including master keys, window keys, and elevator keys, etc.



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<p>i. <u>Interior Staging Group.</u> At all high rise building fires, the IC should establish an Interior Staging Group two or more floors below the fire floor, but as close to the fire floor as conditions permit.</p> <ol style="list-style-type: none">1. Identify the Interior Staging Group by its floor location. E.g., staging on the seventh floor would be known as "Staging 7."2. This Group may be divided into two areas -- one to provide logistical support (e.g., equipment, SCBA re-supply) -- and the other for personnel staging.3. If an Operations Section is established, the Section Chief may operate from or near this location.4. A Stairwell Support company may be established to move required equipment up/down the building. One firefighter should be placed at two floor intervals, and each firefighter should carry equipment not more than two floors. If activated, this function will report to the Interior Staging Group Supervisor. <p>j. <u>Fire Control Room.</u> The IC may assign an officer to the Fire Control Room in buildings so equipped. Personnel assigned to the Fire Control Room are responsible for:</p> <ol style="list-style-type: none">1. establishing telephone communications with division/groups operating in the building;2. providing occupants and/or fire and rescue personnel with special instructions for evacuating endangered areas via a public address system;3. assisting with stairway ventilation and pressurization at the direction of the IC/Ventilation Group;4. monitoring various annunciator and control panels, and keeping the IC informed; and5. resetting and silencing alarms as directed by the IC.	



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k. **First Due Engine**

1. **Unit.** Begin the water supply process by laying a line from the closest hydrant, or split-laying a supply line, etc. Position the **unit** on Side A, reserving adequate space for the aerial unit, and hook up to the standpipe and/or sprinkler system, if so equipped, on or closest to Side A. Immediately report any changes in positioning to other responding **units**.
2. **Unit Officer**
 - A. Give water supply instructions by radio while en route to the incident location.
 - B. On arrival, give reports in accordance with Section 4.IV. of this SOP.
 - C. Follow the provisions of this SOP regarding **IDLH** operations.
3. **Crew.** Advance a hand line to the fire floor and begin rescue, fire attack, confinement, or exposure protection, as appropriate. The driver should pressurize the standpipe and/or sprinkler systems.
4. **Equipment.** Includes SCBA, portable radios, tools, hose, and other **equipment** appropriate for the structure's construction and operational tactics.

l. **Second Due Engine**

1. **Unit.** Ensure and, if necessary, expand upon the water supply for the first due engine.
2. **Crew.** Advance a hand line and back up the first due engine.
3. **Equipment.** Includes SCBA, portable radios, tools, hose, and other **equipment** appropriate for the structure's construction and operational tactics.

m. **Third Due Engine**

1. **Unit.** Begin the water supply process by laying a line from an unused hydrant,



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or split-laying a supply line, etc., to Side C. Position the **unit** at this location, reserving adequate space for the aerial **unit**. Hook up to the standpipe, if one exists, and/or sprinkler system, if so equipped, on or closest to Side C.

2. **Unit Officer.**

- A. Give water supply instructions by radio while en route to the incident location.
- B. On arrival, give reports in accordance with Section 4.IV. of this SOP.

2. **Crew.** Advance a hand line to the floor **above** the fire floor, if one exists, or to the most threatened exposure or horizontal extension, and initiate operations.

3. **Equipment.** Includes SCBA, portable radios, tools, hose, and other **equipment** appropriate for the structure's construction and operational tactics.

n. **Fourth Due Engine**

1. **Unit.** Ensure, and if necessary, expand the water supply for the third due engine.

2. **Crew.**

- A. Report to the **IC** and advise that you are the **RIC**, and assume the operations of the **RIC** unless specifically ordered otherwise.
- B. Determine the occupancy type and building construction.
- C. Determine the location of the fire and its progression.
- D. Monitor all critical operational talk groups and the FDTA channel.
- E. Observe fire conditions, note attack progress, and determine the location of **crews** working in the building.
- F. Secure an additional hose line and immediately relieve the **Standby**



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Team to become the **RIC**. This is usually done face-to-face, but may be done by radio on larger scale incidents.

G. Usually, locate one floor below the fire floor.

3. **Equipment**. Includes SCBA, portable radios, tools, hose, and other **equipment** appropriate for the structure's construction and operational tactics.

o. **Fifth Due Engine**

1. **Unit**. Position the **unit** in an unassigned and uncommitted location to avoid impeding responding or departing **apparatus**.
2. **Crew**. Go to the lobby and establish the Lobby Control Group.
3. **Equipment**. Includes SCBA, portable radios, tools, hose, and other **equipment** appropriate for the structure's construction and operational tactics.

p. **First Due Aerial Unit**

1. **Unit**. Position on Side A.
2. **Crew**:
 - A. Perform rapid outside horizontal ventilation coordinated with the fire attack.
 - B. If necessary, perform initial forcible entry for the first due engine.
 - C. Provide secondary exit(s) for interior **crews** with ground and/or aerial ladders on buildings more than one story high.
 - D. After completing the duties outlined above, report to the fire floor. Initiate or assist the assigned rescue squad with search and rescue. Begin checking for extension by opening concealed spaces as necessary after the bulk of the fire has been extinguished as needed.



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E. Support the fire attack by providing lighting, and perform ventilation, overhaul, and salvage operations.

3. **Equipment.** Includes SCBA, portable radios, tools, hose, and other **equipment** appropriate for the structure's construction and operational tactics.

q. **Second Due Aerial Unit**

1. **Unit.** Position on Side C.

2. **Crew.**

A. Assist the first due aerial **unit** with outside horizontal ventilation that is coordinated with, and supports the fire attack plan.

B. Perform initial forcible entry as necessary for the third due engine.

C. Provide secondary exit(s) for interior **crews** with ground and/or aerial ladders for buildings more than one story high.

D. Provide vertical ventilation when ordered or approved by the **IC**.

E. After completing the duties outlined above, report to the floor above the fire and initiate or assist the assigned rescue squad with search and rescue on that floor. Begin checking for extension by opening concealed spaces as necessary after the bulk of the fire has been extinguished as needed.

F. Support the fire attack by providing lighting, and perform ventilation, overhaul, and salvage operations.

3. **Equipment.** Includes SCBA, portable radios, tools, hose, and other **equipment** appropriate for the structure's construction and operational tactics.

r. **Third Due Aerial Unit**

1. **Unit.** Position to avoid impeding responding or departing **apparatus**.



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<p>2. <u>Crew.</u> Go to top floor (or roof) of the building and immediately ventilate all stairwells charged with smoke. Coordinate all ventilation efforts with the IC, Operations, or Ventilation Group Supervisor, as appropriate.</p> <p>3. <u>Equipment.</u> Includes SCBA, portable radios, tools, hose, and other equipment appropriate for the structure's construction and operational tactics.</p> <p>s. Rescue Squad</p> <p>1. <u>Unit.</u> Position to avoid impeding responding or departing apparatus.</p> <p>2. <u>Unit Officer.</u> Report to the IC as soon as the primary and all subsequent secondary searches are completed and utilities are controlled.</p> <p>3. <u>Crew.</u> Ensure the completion of a systematic search of the building, control the building's utilities, and, in coordination with the assigned aerial units, assist with the ventilation, overhaul, and salvage activities.</p> <p>4. <u>Equipment.</u> Includes SCBA, portable radios, tools, hose, and other equipment appropriate for the structure's construction and operational tactics.</p> <p>t. Ambulance or MICU</p> <p>1. <u>Unit.</u> Locate the vehicle on Side A, positioning it to facilitate the vehicle's exit from the fire ground, if necessary. The vehicle does not have to be included in the aid station.</p> <p>2. <u>Crew.</u> Establish an aid station on Side A.</p> <p>3. <u>Equipment.</u> All units must carry a litter, oxygen equipment, first aid kit, a burn kit, and ALS equipment (Medic Unit only). If the crew is used as a Standby Team, all personnel must wear full PPE and carry hand lights.</p> <p>u. Incident Commander</p> <p>1. <u>Unit.</u> Normally, position on Side A, allowing space for the engine, aerial unit, and rescue squad to implement tactical operations.</p>	



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2. **Officer.** Establish a Command Post and assume Command of the incident scene, in accordance with Section 4.VI. of this SOP, and the MCFRS *Incident Command System*.
3. **Equipment.** Wear appropriate identifier vest, and have immediate access to full **PPE** and SCBA.

X. BASEMENT FIRES IN SINGLE FAMILY, DUPLEX, AND TOWNHOUSE STRUCTURES

- a. Effective size-up and communication at a basement fire are critical to the success of this operation. The location and extent of the fire, the type of building construction, and points of access to the basement must be determined early. If the fire is known to be in the basement, the first arriving engine officer must quickly determine if there is an exterior access to the basement by checking for a basement entrance visually, or based on reports from other **units**. An exterior door most often will be in the rear of the structure.
- b. When attacking a basement fire, the objectives are to protect the primary search, and to keep the fire from extending vertically by containment and extinguishment.
- c. Normally, the first due engine **crew** will stretch the first line to the first floor to contain the fire, and protect the occupants and searching firefighters by closing the basement door and/or using a hose stream aimed at the ceiling over the stairway. **THIS HOSE STREAM MUST NOT BE DIRECTED DOWNWARD INTO THE STAIRWELL.** The officer advancing this line must carefully size up the structure's integrity when determining whether the line should be positioned at the top of the stairs, or from a position closer to the entrance door. The first due **unit officer** must notify the **IC** when this hose line is in place, and confirm that the **crew** is maintaining its position on the first floor.
- d. The **IC** will direct the second or third due engine **crew** to advance a hose line to the exterior basement doorway for attack. The **IC** will ensure that the engine **crew** with the attack line at the exterior basement entrance does not begin the attack until the first line is confirmed to be in position and ready, and the first due engine **crew** has confirmed that it is not advancing down the basement stairs.



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- e. If the first due engine **crew's** position becomes untenable and it cannot hold its position on the first floor, the **crew** must notify Command so that any **crews** operating above it can evacuate before the engine **crew's** withdrawal. The engine **crew** will then take a position outside, normally at the main entrance, and attempt to prevent the fire from extending to the rest of the dwelling from that location until the basement fire can be knocked down. The **IC** will also consider removing the **crews** from positions above the basement once the primary search is completed, even if the basement fire is not under control. The first arriving engine officer and/or the **IC** will also consider taking this position initially (and delaying the primary search) during fires in heavily involved basements, especially in dwellings of lightweight construction.
- f. Basement fires sometimes must be extinguished with the first attack line advanced down the interior stairs, if an exterior entrance into the basement is not accessible, or if there is no exterior entrance at all. The first due engine officer must first determine if it is safe to descend the basement stairs for a direct attack on the fire by evaluating the structure's stability, the life hazard, and the fire and heat conditions at the top of the stairs. If attack will begin through the interior basement stairs, the officer will transmit this information to the **IC**, who will then ensure that no other hose lines are advanced through, or operated into, any exterior basement openings from opposing positions.
- g. If the interior basement stairs cannot be used for an attack, and there is no outside basement entrance, the **IC** will direct **crews** to other available alternatives.

Sec. 5. Implementation and Enforcement. The Fire Chief is the implementation and enforcement authority for all policies and regulations of the Montgomery County Fire and Rescue Service.

Sec.6. Effective Date. This policy is effective on December 1, 2005.

Approved:

Original copy signed by the Fire Chief

11/17/05

Thomas W. Carr, Jr., Chief
Montgomery County Fire and Rescue Service

Date



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